

**III. AMENDMENT TO THE CLAIMS**

1. - 19. (Cancelled).

20. (Currently Amended) An isolated polynucleotide ~~native to the genus Corynebacterium~~, which is at least 90% identical to SEQ ID NO:1, wherein the polynucleotide encodes a protein having the activity of a histidine kinase.

21. (Currently Amended) An isolated polynucleotide ~~native to the genus Corynebacterium~~, which is at least 95% identical to SEQ ID NO:1, wherein the polynucleotide encodes a protein having the activity of a histidine kinase.

22. (Previously Added) The isolated polynucleotide of claims 20 or 21, wherein said polynucleotide is native to the species *Corynebacterium glutamicum*.

23. (Allowed) An isolated polynucleotide encoding a protein comprising the amino acid sequence of SEQ ID NO:2.

24. (Allowed) The polynucleotide of claim 23, wherein said polynucleotide is a DNA.

25. (Allowed) The polynucleotide of claim 23, wherein said polynucleotide is a RNA.

26. (Allowed) An isolated polynucleotide comprising SEQ ID NO:1 nucleotides 342 to 1610.

27. (Allowed) An isolated polynucleotide comprising SEQ ID NO:1.

28. (Allowed) An isolated polynucleotide consisting of SEQ ID NO:1 or a fragment thereof encoding a protein having the activity of a histidine kinase.

29. (Allowed) An isolated polynucleotide comprising the full complement of SEQ ID NO:1.

30. (Currently Amended) An isolated polynucleotide which hybridizes under stringent conditions to ~~SEQ ID NO:1~~ or the full complement thereof SEQ ID NO: 1, wherein said stringent conditions comprise washing in 5X SSC at ~~a temperature from 50 to 68°C~~ and wherein said polynucleotide encodes a protein having the activity of a histidine kinase.

31. (Previously Added) The isolated polynucleotide of claim 30, wherein said polynucleotide is native to the genus *Corynebacterium*.

32. (Previously Added) The isolated polynucleotide of claim 30, wherein said polynucleotide is native to the species *Corynebacterium glutamicum*.

33. (Previously Added) A vector comprising the isolated polynucleotide of claims 20 or 21.

34. (Allowed) A vector comprising the isolated polynucleotide of claims 23, 26, 27, 28 or 29.

35. (Previously Added) A vector comprising the isolated polynucleotide of claim 30.

36. (Allowed) A bacterium comprising the vector of claim 34.

37. (Allowed) The bacterium of claim 36, wherein said bacterium is of the species *Escherichia coli* or of the genus *Corynebacterium*.

38. (Currently Amended) An isolated polynucleotide consisting of at least 30 consecutive nucleotides selected from SEQ ID NO: 1 or the full complement of SEQ ID NO:1, ~~wherein said polynucleotide is a probe in a hybridization reaction to detect or to isolate a polynucleotide encoding a protein having the activity of a histidine kinase.~~

39. (Cancelled).

40. (Previously Added) A bacterium comprising the vector of claim 33.

41. (Previously Added) A bacterium comprising the vector of claim 35.

42. (Previously Added) The vector pCR2.1luxSint contained in the E. coli strain Top10/pCR2.1luxSint (DSM Accession No. 14082).